Attorney's Docket No.: 3700.P002X   Patent

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re of Application of:

    Colleen A. Barton et al.

Application No.: 09/657,759

Filing Date: September 8, 2000

For: METHOD AND LOGIC FOR CAPTURING
        AND ANALYZING CONDUIT DATA

Examiner: Not yet assigned

Art Group: 2131

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on _____January 13, 2003_____
      Date of Deposit

_____Sarah M. Montgomery_____
Name of Person Mailing Correspondence

_____ 1/13/03
Signature   Date

Box Patent Application
Commissioner for Patents
Washington, D.C. 20231

PETITION TO MAKE SPECIAL

Dear Sir/Madam:

    In response to the Decision on Petition to Make Special mailed November 14, 2002, dismissing Applicants' Petition for Accelerated Examination under MPEP §708.02(VIII), Applicants hereby submit a renewed petition to make this application special. In his decision, mailed November 14, 2002, Examiner notes that the petition referred erroneously to an IDS filed on September 3, 1999. This renewed petition correctly references the proper IDS, which was actually filed on January 24, 2002. Consequently, all references deemed most closely related to the subject matter of the application are cited and properly referenced in the present petition, and of record in the application. This application has not yet received any examination by an Examiner.

(A) FEE

    Applicants hereby enclose a check in the amount of $ 130.00 for the petition fee required by 37 C.F.R. § 1.17(i). Furthermore, the Commissioner is hereby authorized to charge payment of any fee due under 37 C.F.R. § 1.16 and § 1.17 associated with this communication or any future communication in this or any related application filed

pursuant to 37 C.F.R. § 1.53 or credit any overpayment to Deposit Account No. 02-2666.

(B) CLAIMS

All claims in this application are directed to a single invention.

If the Office determines that all the claims presented are not obviously directed to a single invention, Applicants will make an election without traverse as a prerequisite to the grant of special status.

(C) SEARCH

A search was made by:
[ ] the inventor
[ ] an attorney or agent
[X] a professional searcher
[ ] a foreign patent office
[ ] USPTO as ISA for PCT/US98/16365

The field of search included:
[X] classes/subclasses: 702/1, 2, 5, 6, 8, 11, 12, 14, 16, 17, 57, 66, 67, 68, 73, 79, 108, 119, 127; 703/13; 345/4188, 156, 501; 324/323; 382/108, 109, 276; 73/04, 170.29; 380/4; 702/ 16 FOR 100 and FOR 101; 73/40.5R, 861.355, 861.357, 204.12, 730, 863.61, 863.71, 863.81, 864.73
[ ] publications
[ ] foreign patents

(D) COPIES OF REFERENCES

Attached are copies of references that are deemed most closely related to the subject matter encompassed by the claims. The selected references are listed in an Information Disclosure Statement submitted with this communication or in one of two previously submitted Information Disclosure Statements, which were submitted for consideration to the United States Patent and Trademark Office on January 24, 2002 and July 15, 2002. Applicants respectfully request that all references be considered and entered into the record of the present application.

(E) DETAILED DISCUSSION OF THE REFERENCES

A detailed discussion of the references deemed most closely related to the subject

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matter encompassed by the claims is provided below.

Each selected reference fails to anticipate the present invention as claimed. To anticipate a claim, the reference must teach every element of the claim. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

Furthermore, the selected references fail to establish a prima facie case of obviousness because the references, individually or in combination, neither teach nor suggest all the claim elements and limitations required by the patent application. Moreover, there is no motivation or suggestion in these references for their combination; and even assuming there were such motivation or suggestion, no combination of these references teaches or suggests the invention as claimed. To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

Therefore, Applicants respectfully submit that all pending claims are distinguishable over the cited references, taken alone or in combination, and should be allowed. A description of the invention is presented followed by a detailed discussion of each of the selected references with a discussion regarding how the claimed subject matter is patentable over each of these references.

Patent Application

The present invention relates to the distribution of data and an associated analyzer program that analyzes the data to provide evaluations and assessments, the analyzer program being limited to analysis of the specific data.

According to one aspect of the invention, a first key is generated and associated with both specific data and a specific copy of an analyzer program that analyzes the specific data. A gatekeeper logic is further generated to utilize at least the first key in order to prevent the specific copy of the analyzer program from analyzing any other data except for the specific data.

According to another aspect of the invention, a first key associated with a specific copy of the analyzer program is determined. A second key associated with specific conduit data is determined. A characteristic parameter representative of a characteristic of the specific conduit data is determined. A gate key is derived utilizing the second key and the characteristic parameter. Execution of the specific copy of the analyzer program, for the purpose of analyzing the specific conduit data, is allowed if the gate key corresponds to the first key.

According to a further aspect of the invention, a first key associated with a

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specific copy of the analyzer program is determined. A second key associated with specific conduit data is determined. A characteristic parameter representative of a characteristic of the specific conduit data is determined. A gate key is derived utilizing the first key and the characteristic parameter. Execution of the specific copy of the analyzer program, for the purpose of analyzing the specific conduit data, is allowed if the gate key corresponds to the second key.

According to yet another aspect of the invention, a user of the analyzer program is provided with a specific copy of the analyzer program and specific conduit data, the specific copy of the analyzer program and the specific conduit data being locked utilizing at least a first key. The user of the analyzer program is provided with gatekeeper logic that, utilizing at least the first key, allows the specific copy of the analyzer program to analyze only the specific conduit data.

According to yet another aspect of the invention, a user of the analyzer program is provided with a specific copy of the analyzer program. The user is also provided with locking logic that locks the specific copy of the analyzer program to selected conduit data. The user is also provided with gatekeeper logic that allows the specific copy of the analyzer program to analyze only the selected conduit data.

According to yet another aspect of the invention, a specific copy of an application program that accesses conduit data is locked to specific conduit data, so that the specific copy of the application program is able to access only the specific conduit data. The locked specific copy of the application program and the specific conduit data are then distributed to a user.

According to another aspect of the invention, there is provided a logic set for locking conduit data and an analyzer program that analyzes the conduit data. The apparatus includes first logic to generate a first key, second logic to associate the first key with both specific conduit data and a specific copy of the analyzer program. Third logic generates gatekeeper logic that, utilizing at least the first key, prevents the specific copy of the analyzer program from analyzing conduit data other than the specific conduit data.

According to another aspect of the invention, there is provided a logic set for executing an analyzer program to analyze conduit data to which the analyzer program is locked. First logic identifies a first key associated with a specific copy of the analyzer program. Second logic identifies a second key associated with specific conduit data. Third logic determines a characteristic parameter representative of a characteristic of the specific conduit data. Fourth logic derives a gate key utilizing the second key and the characteristic parameter. Fifth logic allows execution of the specific copy of the analyzer program to analyze the specific conduit data if the gate key corresponds to the first key.

Discussion of the References

1. <u>U.S. Pat. No. 5,832,083 to Iwayama <i>et al.</i> (hereinafter "Iwayama")</u>

Iwayama discloses a data content utilizing device with a data storing section, a utilization permitting device, and an information converting section. The data storing section stores data contents including: software, computer programs, image data, and

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audio data. The data contents are stored encrypted along with content identification information. An end-user can only access the data contents if he inputs content identification information that corresponds to encoded content identification information.

The information converting section performs the functions of loading data contents from the data storing section, decoding encoded data contents and outputting decoded data contents. The information converting section loads data contents from the data storing section that correspond to content identification information input by a user. The information converting section transmits content identification information, received from the data storing section, and information converting section identification information, from the information converting section, to the utilization permitting device.

The utilization permitting device generates utilization permission information based on the content identification information and the information converting section identification information. Then, the utilization permitting device transmits the utilization permission information to the information converting section.

The information converting section receives the utilization permission information and uses a first key to decode a second key. The first key is a key decoding key, which is used to decode the second key. The second key is a decoding key for decoding data content. The information converting section uses the decoding key to decode data contents and content identification information received from the data storing section. If decoded content identification information from the content storing section corresponds to content identification information input by a user, the information converting section will output the decoded data content.

Each and every element of the independent claims of the present application is not found, either expressly or inherently described, in Iwayama. For example, Iwayama fails to teach or suggest

"gatekeeper logic that, utilizing at least the first key,
<u>prevents the specific copy of the analyzer program</u>
<u>from analyzing conduit data other than the specific</u>
<u>conduit data</u>,"

(emphasis added), as claimed in independent claims 1, 50, 56, 61. Similarly, Iwayama fails to teach or suggest

"gatekeeper logic that, utilizing at least the first key,
<u>allows the specific copy of the analyzer program to</u>
<u>analyze only the specific conduit data</u>,"

(emphasis added), as claimed in independent claim 64. Furthermore, Iwayama fails to teach or suggest

"providing the user of the analyzer program with a
gatekeeper logic that <u>allows the specific copy of the</u>
<u>analyzer program to analyze only the specific conduit</u>
<u>data</u>,"

(emphasis added), as claimed in independent claim 21, or, similarly,

"providing the user of the analyzer program with a
gatekeeper logic that <u>allows the specific copy of the</u>

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analyzer program to analyze only the selected conduit
data,"

(emphasis added), as claimed in independent claim 26.

In addition, Iwayama fails to teach or suggest

"deriving a gate key utilizing the second key and the
characteristic parameter; and
allowing execution of the specific copy of the analyzer
program to analyze the specific conduit data if the gate
key corresponds to the first key,"

(emphasis added), as claimed in independent claims 19, 59, 62.

Moreover, Iwayama fails to teach or suggest

"deriving a gate key utilizing the first key and the
characteristic parameter; and
allowing execution of the specific copy of the analyzer
program to analyze the specific conduit data if the gate
key corresponds to the second key,"

(emphasis added), as claimed in independent claims 20, 60, 63.

Furthermore, Iwayama fails to teach or suggest

"fifth logic to allow executing of the specific copy of the
analyzer program to analyze the specific conduit data if
the gate key corresponds to the first key,"

(emphasis added), as claimed in independent claim 57, or, similarly,

"fifth logic to allow execution of the specific copy of the
analyzer program to analyze the specific conduit data if
the gate key corresponds to the second key,"

(emphasis added), as claimed in independent claim 58.

Iwayama further fails to teach or suggest

"gatekeeper logic that, utilizing at least the first key,
prevents the copy of the program from processing data
other than the data associated with the first key,"

(emphasis added), as claimed in independent claim 66.

Finally, Iwayama fails to teach or suggest

"locking a specific copy of the application program to
specific conduit data so that the specific copy of the
application program is able to access only the specific
conduit data; and
distributing the locked specific copy of the application
program and specific conduit data to a user,"

(emphasis added), as claimed in independent claims 27, 65.

Nowhere in the specification does Iwayama mention, for example, conduit data
or address the fact that only specific data, such as conduit data, can be analyzed using a
specific copy of an analyzer program locked to the data, as claimed in the independent
claims of the present application. Thus, Applicants respectfully submit that
independent claims 1, 19, 20, 21, 26, 27, 50, and 56-66 are distinguishable over Iwayama
and are in condition of allowance. Claims 2-18, 22-25, 28-49, 51-55, and 67-78,

dependent directly or indirectly from independent claims 1, 21, 27, 50, and 66, respectively, are also distinguishable over Iwayama at least for the same reasons as stated above. Therefore, Applicants respectfully submit that Iwayama fails to teach, suggest, or render obvious the present invention as claimed.

2. U.S. Patent No. 5,745,572 to James Press (hereinafter "Press")

Press discloses a mechanism for automatically applying and enforcing cryptographic control policies in a data processing system. The system includes a key distribution service (KDS) 13 to distribute cryptographic keys to a number of applications 11, 12. The KDS 13 has a key database 17 to hold key encrypting keys (KEK) of applications 11, 12.

The system further includes a number of cryptographic support facilities (CSF) 14, 15, 16, corresponding to each application 11, 12, and to the KDS 13. Each CSF is a trusted secure module, which includes a key store 21, a key management function 22, a key generation function 23, and a cryptographic operation function 24.

All keys used in the system have an appended tag stored along with the respective key. The keys and their associated tags are encrypted together whenever they are sent outside the CSF. Therefore, users will be unable to modify the settings of the key tags. Whenever a CSF is invoked to use a key, it will take into account the key tags appended to that key, for example, to determine whether it is permissible to use that key to derive other keys and whether to apply cryptographic control policies before the key is used.

Each and every element of the independent claims of the present application is not found, either expressly or inherently described, in Press. Press fails to teach or suggest

> "gatekeeper logic that, utilizing at least the first key,
> prevents the specific copy of the analyzer program
> from analyzing conduit data other than the specific
> conduit data,"

(emphasis added), as claimed in independent claims 1, 50, 56, 61. Similarly, Press fails to teach or suggest

> "gatekeeper logic that, utilizing at least the first key,
> allows the specific copy of the analyzer program to
> analyze only the specific conduit data,"

(emphasis added), as claimed in independent claim 64. Furthermore, Press fails to teach or suggest

> "providing the user of the analyzer program with a
> gatekeeper logic that allows the specific copy of the
> analyzer program to analyze only the specific conduit
> data,"

(emphasis added), as claimed in independent claim 21, or, similarly,

> "providing the user of the analyzer program with a
> gatekeeper logic that allows the specific copy of the
> analyzer program to analyze only the selected conduit
> data,"

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(emphasis added), as claimed in independent claim 26.

In addition, Press fails to teach or suggest

"deriving a gate key utilizing the second key and the characteristic parameter; and allowing execution of the specific copy of the analyzer program to analyze the specific conduit data if the gate key corresponds to the first key,"

(emphasis added), as claimed in independent claims 19, 59, 62.

Moreover, Press fails to teach or suggest

"deriving a gate key utilizing the first key and the characteristic parameter; and allowing execution of the specific copy of the analyzer program to analyze the specific conduit data if the gate key corresponds to the second key,"

(emphasis added), as claimed in independent claims 20, 60, 63.

Furthermore, Press fails to teach or suggest

"fifth logic to allow executing of the specific copy of the analyzer program to analyze the specific conduit data if the gate key corresponds to the first key,"

(emphasis added), as claimed in independent claim 57, or, similarly,

"fifth logic to allow execution of the specific copy of the analyzer program to analyze the specific conduit data if the gate key corresponds to the second key,"

(emphasis added), as claimed in independent claim 58.

Press further fails to teach or suggest

"gatekeeper logic that, utilizing at least the first key, prevents the copy of the program from processing data other than the data associated with the first key,"

(emphasis added), as claimed in independent claim 66.

Finally, Press fails to teach or suggest

"locking a specific copy of the application program to specific conduit data so that the specific copy of the application program is able to access only the specific conduit data; and distributing the locked specific copy of the application program and specific conduit data to a user,"

(emphasis added), as claimed in independent claims 27, 65.

Nowhere in the specification does Press mention, for example, conduit data or address the fact that only specific data, such as conduit data, can be analyzed using a specific copy of an analyzer program locked to the data, as claimed in the independent claims of the present application. Thus, Applicants respectfully submit that independent claims 1, 19, 20, 21, 26, 27, 50, and 56-66 are distinguishable over Press and are in condition of allowance. Claims 2-18, 22-25, 28-49, 51-55, and 67-78, dependent directly or indirectly from independent claims 1, 21, 27, 50, and 66, respectively, are also distinguishable over Press at least for the same reasons as stated above. Therefore,

Applicants respectfully submit that Press fails to teach, suggest, or render obvious the present invention as claimed.

3. U.S. Patent No. 4,796,466 to Farmer (hereinafter "Farmer")

Farmer discloses a system for monitoring pipelines through which fluids, be they gases or liquids flow using conventional readily available monitoring equipment, that determines the probability of a leak as opposed to the actuality of a leak using a moving average of statistical information gained from a plurality of monitoring stations that monitor either pressure or flow. A threshold level of probability may also be established to sound an alarm or take other action.

In accordance with Farmer, sensors to measure either pressure or velocity are placed at one to ten mile intervals throughout a section of a pipeline. In the case of pressure, transducers are used. The transducer measures the hydraulic pressure of the fluid in the pipeline and outputs an electric signal that is proportional to the pressure. The average of several measurements for a set of sensors at a particular moment in time is calculated and compared to an average for another set of sensors at a time previous. Such a comparison is called a comparison of moving averages and can be used to statistically determine the likelihood of a leak in the pipeline.

Each and every element of the independent claims of the present application is not found, either expressly or inherently described, in Farmer. Farmer fails to teach or suggest

> "gatekeeper logic that, utilizing at least the first key, prevents the specific copy of the analyzer program from analyzing conduit data other than the specific conduit data,"

(emphasis added), as claimed in independent claims 1, 50, 56, 61. Similarly, Farmer fails to teach or suggest

> "gatekeeper logic that, utilizing at least the first key, allows the specific copy of the analyzer program to analyze only the specific conduit data,"

(emphasis added), as claimed in independent claim 64. Furthermore, Farmer fails to teach or suggest

> "providing the user of the analyzer program with a gatekeeper logic that allows the specific copy of the analyzer program to analyze only the specific conduit data,"

(emphasis added), as claimed in independent claim 21, or, similarly,

> "providing the user of the analyzer program with a gatekeeper logic that allows the specific copy of the analyzer program to analyze only the selected conduit data,"

(emphasis added), as claimed in independent claim 26.

In addition, Farmer fails to teach or suggest

> "deriving a gate key utilizing the second key and the

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characteristic parameter; and
<u>allowing execution of the specific copy of the analyzer
program to analyze the specific conduit data</u> if the gate
key corresponds to the first key,"
(emphasis added), as claimed in independent claims 19, 59, 62.

Moreover, Farmer fails to teach or suggest
"deriving a gate key utilizing the first key and the
characteristic parameter; and
<u>allowing execution of the specific copy of the analyzer
program to analyze the specific conduit data</u> if the gate
key corresponds to the second key,"
(emphasis added), as claimed in independent claims 20, 60, 63.

Furthermore, Farmer fails to teach or suggest
"fifth logic <u>to allow executing of the specific copy of the
analyzer program to analyze the specific conduit data</u> if
the gate key corresponds to the first key,"
(emphasis added), as claimed in independent claim 57, or, similarly,
"fifth logic <u>to allow execution of the specific copy of the
analyzer program to analyze the specific conduit data</u> if
the gate key corresponds to the second key,"
(emphasis added), as claimed in independent claim 58.

Farmer further fails to teach or suggest
"gatekeeper logic that, utilizing at least the first key,
<u>prevents the copy of the program from processing data
other than the data associated with the first key</u>,"
(emphasis added), as claimed in independent claim 66.

Finally, Farmer fails to teach or suggest
"locking a specific copy of the application program to
specific conduit data so that <u>the specific copy of the
application program is able to access only the specific
conduit data</u>; and
distributing the locked specific copy of the application
program and specific conduit data to a user,"
(emphasis added), as claimed in independent claims 27, 65.

Nowhere in the specification does Farmer address the fact that only specific data, such as conduit data, can be analyzed using a specific copy of an analyzer program locked to the data, as claimed in the independent claims of the present application. Thus, Applicants respectfully submit that independent claims 1, 19, 20, 21, 26, 27, 50, and 56-66 are distinguishable over Farmer and are in condition of allowance. Claims 2-18, 22-25, 28-49, 51-55, and 67-78, dependent directly or indirectly from independent claims 1, 21, 27, 50, and 66, respectively, are also distinguishable over Farmer at least for the same reasons as stated above. Therefore, Applicants respectfully submit that Farmer fails to teach, suggest, or render obvious the present invention as claimed.

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4. U.S. Patent No. 4,945,775 to Adams et al. (hereinafter "Adams")

Adams discloses a pipeline monitoring system for determining profile, ovality and displacement of oil, gas and products pipelines. The system comprises one or more pig carriers housing a plurality of sensors including a strapdown inertial measurement system, a secondary sonar measurement system, digital recorder, weld detector and odometer.

The inertial measurement system detects primary acceleration and orientation data of the monitoring system within a pipeline and the secondary system generates redundant data for verifying the acceleration orientation information provided by the inertial system. The digital recorder records all of the information generated by the various measurement systems and sensors for post processing analysis to determine the aforementioned features of profile, ovality and displacement of pipelines.

Each and every element of the independent claims of the present application is not found, either expressly or inherently described, in Adams. Adams fails to teach or suggest

"gatekeeper logic that, utilizing at least the first key,
prevents the specific copy of the analyzer program
from analyzing conduit data other than the specific
conduit data,"

(emphasis added), as claimed in independent claims 1, 50, 56, 61. Similarly, Adams fails to teach or suggest

"gatekeeper logic that, utilizing at least the first key,
allows the specific copy of the analyzer program to
analyze only the specific conduit data,"

(emphasis added), as claimed in independent claim 64. Furthermore, Adams fails to teach or suggest

"providing the user of the analyzer program with a
gatekeeper logic that allows the specific copy of the
analyzer program to analyze only the specific conduit
data,"

(emphasis added), as claimed in independent claim 21, or, similarly,

"providing the user of the analyzer program with a
gatekeeper logic that allows the specific copy of the
analyzer program to analyze only the selected conduit
data,"

(emphasis added), as claimed in independent claim 26.

In addition, Adams fails to teach or suggest

"deriving a gate key utilizing the second key and the
characteristic parameter; and
allowing execution of the specific copy of the analyzer
program to analyze the specific conduit data if the gate
key corresponds to the first key,"

(emphasis added), as claimed in independent claims 19, 59, 62.

Moreover, Adams fails to teach or suggest

"deriving a gate key utilizing the first key and the

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characteristic parameter; and
allowing execution of the specific copy of the analyzer
program to analyze the specific conduit data if the gate
key corresponds to the second key,"
(emphasis added), as claimed in independent claims 20, 60, 63.

Furthermore, Adams fails to teach or suggest
"fifth logic to allow executing of the specific copy of the
analyzer program to analyze the specific conduit data if
the gate key corresponds to the first key,"
(emphasis added), as claimed in independent claim 57, or, similarly,
"fifth logic to allow execution of the specific copy of the
analyzer program to analyze the specific conduit data if
the gate key corresponds to the second key,"
(emphasis added), as claimed in independent claim 58.

Adams further fails to teach or suggest
"gatekeeper logic that, utilizing at least the first key,
prevents the copy of the program from processing data
other than the data associated with the first key,"
(emphasis added), as claimed in independent claim 66.

Finally, Adams fails to teach or suggest
"locking a specific copy of the application program to
specific conduit data so that the specific copy of the
application program is able to access only the specific
conduit data; and
distributing the locked specific copy of the application
program and specific conduit data to a user,"
(emphasis added), as claimed in independent claims 27, 65.

Nowhere in the specification does Adams address the fact that only specific data, such as conduit data, can be analyzed using a specific copy of an analyzer program locked to the data, as claimed in the independent claims of the present application. Thus, Applicants respectfully submit that independent claims 1, 19, 20, 21, 26, 27, 50, and 56-66 are distinguishable over Adams and are in condition of allowance. Claims 2-18, 22-25, 28-49, 51-55, and 67-78, dependent directly or indirectly from independent claims 1, 21, 27, 50, and 66, respectively, are also distinguishable over Adams at least for the same reasons as stated above. Therefore, Applicants respectfully submit that Adams fails to teach, suggest, or render obvious the present invention as claimed.

5. U.S. Patent No. 6,239,593 to Burkhardt et al. (hereinafter "Burkhardt")

Burkhardt discloses a nondestructive method for inspecting steel pipelines for plastically deformed regions caused by mechanical damage to the pipeline. The method and system use nonlinear harmonic detection methods to detect mechanical damage in pipelines.

Burkhardt teaches a time-varying magnetic field to sense magnetic properties of the pipeline. The odd-numbered harmonic frequencies are detected and their

amplitudes are related to the magnetic condition of the material under test to determine areas of mechanical damage. This technique can be used for rapidly surveying stress states in pipelines where nonlinear harmonic sensing devices are attached to a pigging device moving through a pipeline at a relatively high rate of speed.

In accordance with Burkhardt, several nonlinear harmonic sensing devices are attached to a pig device to detect magnetic properties. An alternating sinusoidal magnetic field is applied to the pipeline. Because of magnetic hysteresis and nonlinear permeability of ferromagnetic material, the magnetic induction in the material becomes distorted. The distorted magnetic induction waveform contains odd numbered harmonic frequencies of the applied magnetic field. With the nonlinear harmonics method, one or more of these harmonic frequencies are detected and their amplitudes are related to the magnetic properties of the material under test. Because of the magnoelastic affect, stress and plastic deformation affect the magnetic properties and thus the harmonic signals. Areas of mechanical damage are then identified and characterized by the NLH response.

Each and every element of the independent claims of the present application is not found, either expressly or inherently described, in Burkhardt. Burkhardt fails to teach or suggest

> "gatekeeper logic that, utilizing at least the first key,
> prevents the specific copy of the analyzer program
> from analyzing conduit data other than the specific
> conduit data,"

(emphasis added), as claimed in independent claims 1, 50, 56, 61. Similarly, Burkhardt fails to teach or suggest

> "gatekeeper logic that, utilizing at least the first key,
> allows the specific copy of the analyzer program to
> analyze only the specific conduit data,"

(emphasis added), as claimed in independent claim 64. Furthermore, Burkhardt fails to teach or suggest

> "providing the user of the analyzer program with a
> gatekeeper logic that allows the specific copy of the
> analyzer program to analyze only the specific conduit
> data,"

(emphasis added), as claimed in independent claim 21, or, similarly,

> "providing the user of the analyzer program with a
> gatekeeper logic that allows the specific copy of the
> analyzer program to analyze only the selected conduit
> data,"

(emphasis added), as claimed in independent claim 26.

In addition, Burkhardt fails to teach or suggest

> "deriving a gate key utilizing the second key and the
> characteristic parameter; and
> allowing execution of the specific copy of the analyzer
> program to analyze the specific conduit data if the gate
> key corresponds to the first key,"

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(emphasis added), as claimed in independent claims 19, 59, 62.

> Moreover, Burkhardt fails to teach or suggest
>> "deriving a gate key utilizing the first key and the
>> characteristic parameter; and
>> <u>allowing execution of the specific copy of the analyzer</u>
>> <u>program to analyze the specific conduit data</u> if the gate
>> key corresponds to the second key,"

(emphasis added), as claimed in independent claims 20, 60, 63.

> Furthermore, Burkhardt fails to teach or suggest
>> "fifth logic <u>to allow executing of the specific copy of the</u>
>> <u>analyzer program to analyze the specific conduit data</u> if
>> the gate key corresponds to the first key,"

(emphasis added), as claimed in independent claim 57, or, similarly,
>> "fifth logic <u>to allow execution of the specific copy of the</u>
>> <u>analyzer program to analyze the specific conduit data</u> if
>> the gate key corresponds to the second key,"

(emphasis added), as claimed in independent claim 58.

> Burkhardt further fails to teach or suggest
>> "gatekeeper logic that, utilizing at least the first key,
>> <u>prevents the copy of the program from processing data</u>
>> <u>other than the data associated with the first key</u>,"

(emphasis added), as claimed in independent claim 66.

> Finally, Burkhardt fails to teach or suggest
>> "locking a specific copy of the application program to
>> specific conduit data so that <u>the specific copy of the</u>
>> <u>application program is able to access only the specific</u>
>> <u>conduit data</u>; and
>> distributing the locked specific copy of the application
>> program and specific conduit data to a user,"

(emphasis added), as claimed in independent claims 27, 65.

Nowhere in the specification does Burkhardt address the fact that only specific data, such as conduit data, can be analyzed using a specific copy of an analyzer program locked to the data, as claimed in the independent claims of the present application. Thus, Applicants respectfully submit that independent claims 1, 19, 20, 21, 26, 27, 50, and 56-66 are distinguishable over Burkhardt and are in condition of allowance. Claims 2-18, 22-25, 28-49, 51-55, and 67-78, dependent directly or indirectly from independent claims 1, 21, 27, 50, and 66, respectively, are also distinguishable over Burkhardt at least for the same reasons as stated above. Therefore, Applicants respectfully submit that Burkhardt fails to teach, suggest, or render obvious the present invention as claimed.

6. <u>U.S. Patent No. 6,243,483 to Petrou et al. (hereafter "Petrou")</u>

Petrou discloses pipeline data and satellite data that are used to provide surveillance for a pipeline. The satellite data is integrated with the pipeline data to

produce a current pipeline map. The current pipeline map is then compared with a previous pipeline map to determine whether the route of the pipeline or a surrounding environment of the pipeline has changed. The satellite data includes very high resolution (VHR) satellite imagery and the pipeline data includes location data that is a series of global positioning system (GPS) coordinates.

In accordance with Petrou, the layout of a pipeline is determined using GPS and satellite imagery. For instance, a pig with GPS sensors traverses the pipeline while recording the location of the pipeline with GPS sensors. The GPS data is combined with satellite imagery data to determine a map of the pipeline. The mapping process is done at different times and each result is compared to determine whether a change occurs. If a change is detected, the GPS coordinates associated with the difference can easily be identified and the location explored.

Each and every element of the independent claims of the present application is not found, either expressly or inherently described, in Petrou. Petrou fails to teach or suggest

"gatekeeper logic that, utilizing at least the first key, <u>prevents the specific copy of the analyzer program from analyzing conduit data other than the specific conduit data,</u>"

(emphasis added), as claimed in independent claims 1, 50, 56, 61. Similarly, Petrou fails to teach or suggest

"gatekeeper logic that, utilizing at least the first key, <u>allows the specific copy of the analyzer program to analyze only the specific conduit data,</u>"

(emphasis added), as claimed in independent claim 64. Furthermore, Petrou fails to teach or suggest

"providing the user of the analyzer program with a gatekeeper logic that <u>allows the specific copy of the analyzer program to analyze only the specific conduit data,</u>"

(emphasis added), as claimed in independent claim 21, or, similarly,

"providing the user of the analyzer program with a gatekeeper logic that <u>allows the specific copy of the analyzer program to analyze only the selected conduit data,</u>"

(emphasis added), as claimed in independent claim 26.

In addition, Petrou fails to teach or suggest

"deriving a gate key utilizing the second key and the characteristic parameter; and <u>allowing execution of the specific copy of the analyzer program to analyze the specific conduit data</u> if the gate key corresponds to the first key,"

(emphasis added), as claimed in independent claims 19, 59, 62.

Moreover, Petrou fails to teach or suggest

"deriving a gate key utilizing the first key and the

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characteristic parameter; and
allowing execution of the specific copy of the analyzer
program to analyze the specific conduit data if the gate
key corresponds to the second key,"

(emphasis added), as claimed in independent claims 20, 60, 63.

Furthermore, Petrou fails to teach or suggest

"fifth logic to allow executing of the specific copy of the
analyzer program to analyze the specific conduit data if
the gate key corresponds to the first key,"

(emphasis added), as claimed in independent claim 57, or, similarly,

"fifth logic to allow execution of the specific copy of the
analyzer program to analyze the specific conduit data if
the gate key corresponds to the second key,"

(emphasis added), as claimed in independent claim 58.

Petrou further fails to teach or suggest

"gatekeeper logic that, utilizing at least the first key,
prevents the copy of the program from processing data
other than the data associated with the first key,"

(emphasis added), as claimed in independent claim 66.

Finally, Petrou fails to teach or suggest

"locking a specific copy of the application program to
specific conduit data so that the specific copy of the
application program is able to access only the specific
conduit data; and
distributing the locked specific copy of the application
program and specific conduit data to a user,"

(emphasis added), as claimed in independent claims 27, 65.

Nowhere in the specification does Petrou address the fact that only specific data,
such as conduit data, can be analyzed using a specific copy of an analyzer program
locked to the data, as claimed in the independent claims of the present application.
Thus, Applicants respectfully submit that independent claims 1, 19, 20, 21, 26, 27, 50,
and 56-66 are distinguishable over Petrou and are in condition of allowance. Claims 2-
18, 22-25, 28-49, 51-55, and 67-78, dependent directly or indirectly from independent
claims 1, 21, 27, 50, and 66, respectively, are also distinguishable over Petrou at least for
the same reasons as stated above. Therefore, Applicants respectfully submit that Petrou
fails to teach, suggest, or render obvious the present invention as claimed.

7. U.S. Patent No. 4,963,742 to Abernathy (hereafter "Abernathy")

Abernathy discloses infrared scanning equipment and video cameras that are
used in an airborne survey of a pipeline while recordings are made of the information
collected. Simultaneously, information is recorded to identify the locations of the
collected information. The recorded IR tapes are then examined for portions containing
temperatures, which exceed established threshold temperatures. These threshold
temperature areas are then examined in the comparable visual tapes for reasons other

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than pipeline leaks to account for the anomalies.

Other available information pertaining to the pipeline may also be referred to for possible explanations. Those areas for which analysis provides no explanation are then visited to repair leaks or find non-leak explanations. A record is made for future use, which identifies all areas having explained anomalies in order to avoid the need for future repeat visits to these areas.

In accordance with Abernathy, infrared sensors and video cameras are affixed to an airplane. The airplane, with the sensor equipment, is flown over the area in which a pipeline is located and data is collected simultaneously from the video cameras and the infrared sensors. Upon completion of the air survey, data received from the infrared sensors is analyzed to determine whether anomalies exist within the data. For example, an anomaly may exist where data temperature data exceeds a threshold temperature.

When an anomaly is discovered, the video corresponding to the time and location of the infrared data can be viewed to determine whether there is an obvious explanation for the anomaly. If no obvious explanation is found by viewing the video, the actual physical site of the anomaly reading can be investigated for pipeline leaks and the like.

Each and every element of the independent claims of the present application is not found, either expressly or inherently described, in Abernathy. Abernathy fails to teach or suggest

"gatekeeper logic that, utilizing at least the first key,
prevents the specific copy of the analyzer program
from analyzing conduit data other than the specific
conduit data,"

(emphasis added), as claimed in independent claims 1, 50, 56, 61. Similarly, Abernathy fails to teach or suggest

"gatekeeper logic that, utilizing at least the first key,
allows the specific copy of the analyzer program to
analyze only the specific conduit data,"

(emphasis added), as claimed in independent claim 64. Furthermore, Abernathy fails to teach or suggest

"providing the user of the analyzer program with a
gatekeeper logic that allows the specific copy of the
analyzer program to analyze only the specific conduit
data,"

(emphasis added), as claimed in independent claim 21, or, similarly,

"providing the user of the analyzer program with a
gatekeeper logic that allows the specific copy of the
analyzer program to analyze only the selected conduit
data,"

(emphasis added), as claimed in independent claim 26.

In addition, Abernathy fails to teach or suggest

"deriving a gate key utilizing the second key and the
characteristic parameter; and
allowing execution of the specific copy of the analyzer

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program to analyze the specific conduit data if the gate
key corresponds to the first key,"
(emphasis added), as claimed in independent claims 19, 59, 62.

Moreover, Abernathy fails to teach or suggest
"deriving a gate key utilizing the first key and the
characteristic parameter; and
allowing execution of the specific copy of the analyzer
program to analyze the specific conduit data if the gate
key corresponds to the second key,"
(emphasis added), as claimed in independent claims 20, 60, 63.

Furthermore, Abernathy fails to teach or suggest
"fifth logic to allow executing of the specific copy of the
analyzer program to analyze the specific conduit data if
the gate key corresponds to the first key,"
(emphasis added), as claimed in independent claim 57, or, similarly,
"fifth logic to allow execution of the specific copy of the
analyzer program to analyze the specific conduit data if
the gate key corresponds to the second key,"
(emphasis added), as claimed in independent claim 58.

Abernathy further fails to teach or suggest
"gatekeeper logic that, utilizing at least the first key,
prevents the copy of the program from processing data
other than the data associated with the first key,"
(emphasis added), as claimed in independent claim 66.

Finally, Abernathy fails to teach or suggest
"locking a specific copy of the application program to
specific conduit data so that the specific copy of the
application program is able to access only the specific
conduit data; and
distributing the locked specific copy of the application
program and specific conduit data to a user,"
(emphasis added), as claimed in independent claims 27, 65.

Nowhere in the specification does Abernathy address the fact that only specific
data, such as conduit data, can be analyzed using a specific copy of an analyzer
program locked to the data, as claimed in the independent claims of the present
application. Thus, Applicants respectfully submit that independent claims 1, 19, 20, 21,
26, 27, 50, and 56-66 are distinguishable over Abernathy and are in condition of
allowance. Claims 2-18, 22-25, 28-49, 51-55, and 67-78, dependent directly or indirectly
from independent claims 1, 21, 27, 50, and 66, respectively, are also distinguishable over
Abernathy at least for the same reasons as stated above. Therefore, Applicants
respectfully submit that Abernathy fails to teach, suggest, or render obvious the present
invention as claimed.

In view of the above remarks, the application is considered in good and proper form for allowance, and the Examiner is respectfully requested to pass this application to issue. If, in the opinion of the Examiner, a telephone conference would expedite the prosecution of the application, the Examiner is invited to call the undersigned attorney at (408) 947-8200 ext. 220.

Respectfully submitted,

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